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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,898	12/18/2001	Michael P. Nettekoven	C01-019	5173
23459	7590	08/24/2004	EXAMINER PUNNOOSE, ROY M	
ARTHUR J. O'DEA LEGAL DEPARTMENT COGNEX CORPORATION ONE VISION DRIVE NATICK, MA 01760-2077			ART UNIT 2877	
DATE MAILED: 08/24/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,898

Applicant(s)	
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NETTEKOVEN ET AL.

Examiner

Roy M. Punnoose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/14/04
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7 and 13 is/are rejected.
- 7) ☒ Claim(s) 4, 5 and 8-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/5/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 2, 4-6, 8-9 and 12 objected to because of the following informalities: The use of the term “positionable” creates doubt because it implies that infinite number of other positions that are possible. Appropriate correction is required.

For examination purposes, it is assumed that applicant intended to use “positionable” instead of “positioned” as presented in claim 13.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Weber (US 4,924,086).

4. Claim 1 is rejected because Weber discloses an apparatus comprising:
a light source 20 (see Figure 1), that forms a plurality of initial light rays that are directable along a direction essentially perpendicular to a first direction (the first direction being the direction perpendicular to direction “f” in Figure 1), and, a guidance member 25 positioned proximate the light source that intercepts and redirects the initial light rays such that redirected rays exit the guidance member 25 along paths that form angles with the respect to the initial rays and which have a lateral component (in the direction perpendicular to direction “f” in Figure 1) aligned with the first direction and so that the redirected rays subtend an illuminated portion of the flat surface 13.

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5. Claim 2 is rejected because the light source 20 is positionable such that the initial rays are essentially perpendicular to the flat surface 13 (see Figure 1).

6. Claim 3 is rejected because the guidance member 25 redirects the rays such that the redirected rays are essentially parallel to each other (see Figure 1). It should be noted that a beam of light consists of a plurality of parallel rays.

7. Claim 6 is rejected because the flat surface 13 has a second dimension (in the direction of “F” in Figure 1) perpendicular to the first dimension (in the direction perpendicular to direction “F” in Figure 1) and wherein the source 20 is positionable such that the initial rays are angled so as to have a longitudinal component aligned with the second direction (in the direction of “F” in Figure 1).

8. Claim 13 is rejected because the guidance member 25 is positioned at least in part between the source 20 and the flat surface 13 (see Figure 1).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weber (US 4,924,086).

Claim 7 is rejected because Weber discloses all the claim limitations as disclosed in paragraph 4 above except for the explicit disclosure that the guidance member is a prismatic film

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in an apparatus to be used to illuminate an object having an essentially flat surface so that any flaws on the flat surface can be easily and accurately be detected.

In view of Weber's disclosure of one type of guidance member used for deflecting or guiding a beam of light, it would have been obvious to one of ordinary skills in the art to substitute it with any other type of guidance member in an apparatus to be used to illuminate an object having an essentially flat surface so that any flaws on the flat surface can be easily and accurately be detected.

Allowable Subject Matter

11. Claims 4, 5 and 8-12 are objected to as being dependent upon a rejected base claim, but would be allowable if the rejections to the base claim(s) can be overcome, or, rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 4 and 8-12 are allowable because prior art does not disclose that the light source is a line light source having a line surface from which light emanates, the source positionable such that the line surface is parallel to the flat surface and extends in a first direction.

13. Claim 5 is allowable because prior art does not disclose the apparatus of claim 1 includes a camera set having a field of view and positionable such that the field of view includes at least a segment of the illuminated portion of the flat surface.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**.

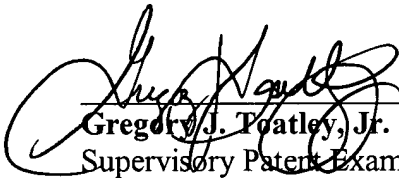
The examiner can normally be reached on 9:00 AM - 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gregory J. Toatley, Jr.** can be reached on **571-272-2059**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roy M. Punnoose
Patent Examiner
Art Unit 2877
August 23, 2004



Gregory J. Toatley, Jr.
Supervisory Patent Examiner 2877